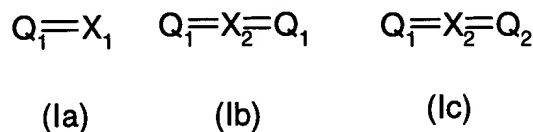


### Remarks

Claims 1-15 are pending, while claims 3-15 have been withdrawn from consideration pursuant to a restriction requirement and an election of species. Claim 2 has been amended to incorporate subject matter otherwise incorporated by reference. The amendment does not introduce new patentable features or require a new search. The amendment is meant to clarify the subject matter. For this reason, Applicants submit that good cause exists to enter the amendments even though presented after final rejection.

The Examiner rejects claims 1 and 2 under 35 U.S.C. 103 as being unpatentable over the compounds shown in published European Patent Application 632,102 ("EP '102"). The Examiner refers to compound 15 (after speaking with the Examiner - meaning the compound shown on page 42, line 15). Applicants respectfully traverse this rejection.

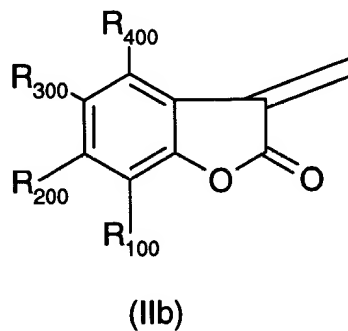
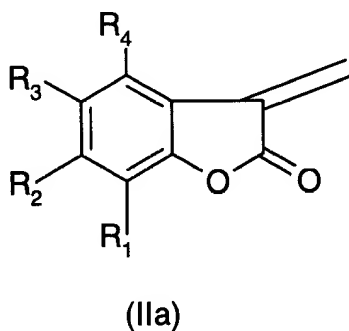
Claim 1 is drawn to compounds of formulae (Ia), (Ib) or (Ic)



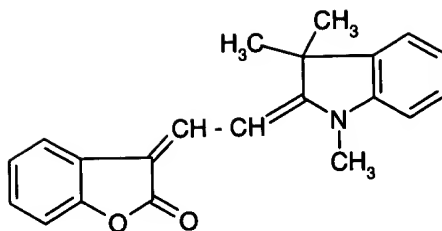
in which

$Q_1$  is a benzofuran-2-one of the formula (IIa), and

$Q_2$  is a benzofuran-2-one of the formula (IIb)



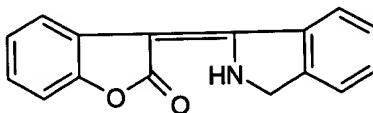
The compound from EP '102 is represented by the formula



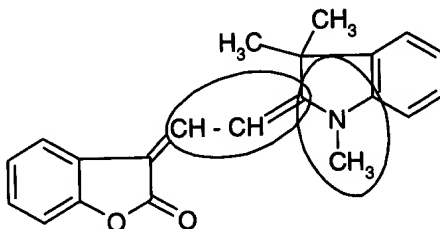
The prior art compound differs from the instantly claimed compounds of formula (Ia), (Ib) and (Ic) as follows:

a) with respect to formula (Ia):

The closest structural possibility occurs for  $X_1$  being a methylene radical  $\text{=C} \begin{smallmatrix} \text{Q}_3 \\ \text{Q}_4 \end{smallmatrix}$ , wherein  $\text{Q}_3$  and  $\text{Q}_4$  are together an isoindoline radical. In such a case, the resulting compound would be of formula



From such point, there are two relevant structural differences:



The prior art compound has an indolone moiety instead of an isoindolone and a bridge  $\text{=CH-CH=}$  instead of a direct bond between the benzofuran and isoindolon component.

The inventive compounds of formulas (Ib) and (Ic) bear two benzofuran-2-one radicals and therefore are both structurally further away from the compound of EP '102. There is no teaching, which would lead or motivate one skilled in the art to modify the compound on page 42, line 15 to arrive at the inventive compounds. Withdrawal of the grounds of rejection and passage of this application to issue is therefore earnestly solicited.

Applicants submit that the instant application is now in condition for allowance. In the event that minor amendments will further prosecution, Applicants request that the Examiner contact the undersigned representative.

Respectfully submitted,

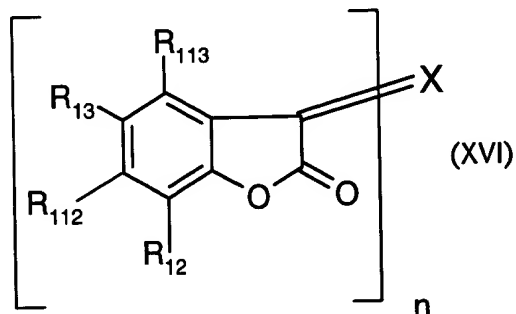


David R. Crichton  
Attorney for Applicants  
Reg. No. 37,300

Ciba Specialty  
Chemicals Corporation  
540 White Plains Road  
P.O. Box 2005  
Tarrytown, New York 10591-9005  
Tel: (914) 785-7124  
Fax: (914) 785-7102  
DRC/

Amended Claims with underlining and bracketing

2. (Twice amended) A compound according to claim 1 of the formula (XVI)

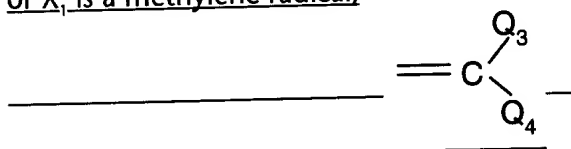


in which

n is 1 or 2, and

if n is 1

X is [ $X_1$  as defined in claim 1,] a hydrazone or imine radical, with the proviso that, if  $R_{12}$ ,  $R_{13}$ ,  $R_{112}$  and  $R_{113}$  are hydrogen, or at least one  $R_{12}$ ,  $R_{13}$ ,  $R_{112}$  or  $R_{113}$  is methyl, the hydrazone radical is excluded, or, if  $R_{12}$ ,  $R_{13}$ ,  $R_{112}$  or  $R_{113}$  is hydrogen,  $X_1$  is not phenylimine- or 4-dimethylamine-phenylimine, or  $X_1$  is a methylene radical,



in which

$Q_3$  is a primary or secondary amine radical and  $Q_4$  is hydrogen or  $C_1$ - $C_{24}$ alkyl,  $-CO-(C_1-C_{24}alkyl)$ ,  $-CO-O-(C_1-C_{24}alkyl)$ ,  $C_1$ - $C_{24}$ alkoxy,  $C_1$ - $C_{24}$ alkylthio,  $C_5$ - $C_{12}$ cycloalkyl,  $C_5$ - $C_{12}$ cycloalkoxy,  $C_5$ - $C_{12}$ cycloalkylthio,  $C_2$ - $C_{24}$ alkenyl,  $C_6$ - $C_{24}$ aryl,  $-CO-O-(C_6-C_{24}aryl)$ ,  $-CO-(C_6-C_{24}aryl)$ ,  $C_6$ - $C_{24}$ aryloxy, a primary or secondary amine radical,  $C_6$ - $C_{12}$ arylthio,  $C_7$ - $C_{25}$ alkyl, thienyl, benzothienyl, dibenzothienyl, thianthrenyl, furyl, furfuryl, 2H-pyranyl, benzofuranyl, isobenzofuranyl, benzimidazolyl, benzothiazolyl, dibenzofuranyl, phenoxythiiny, pyrrolyl, imidazolyl, pyrazolyl, pyridyl, bipyridyl, triazinyl, pyrimidinyl, pyrazinyl, pyridazinyl, indoliziny, isoindolyl, indolyl, indazolyl, purinyl, quinoliziny, quinolyl, isoquinolyl, phthalazinyl, naphthyridinyl, quinoxaliny, quinazoliny, cinnoliny, pteridinyl, carbazolyl, carboliny, benzotriazolyl, benzoxazolyl, phenanthridinyl, acridinyl, perimidinyl, phenanthroliny, phenazinyl, isothiazolyl, phenothiazinyl, isoxazolyl, furazanyl or phenoxazinyl O-thienyl, O-benzothienyl, O-dibenzothienyl, O-thianthrenyl, O-furyl, O-furfuryl, O-2H-pyranyl, O-benzofuranyl, O-isobenzofuranyl, O-benzimidazolyl, O-benzothiazolyl, O-dibenzofuranyl, O-phenoxythiiny, O-pyrrolyl, O-imidazolyl, O-pyrazolyl, O-pyridyl, O-bipyridyl, O-triazinyl, O-pyrimidinyl, O-pyrazinyl, O-pyridazinyl, O-indoliziny, O-isoindolyl, O-indolyl, O-indazolyl, O-purinyl, O-quinoliziny, O-quinolyl, O-isoquinolyl, O-

phthalazinyl, O-naphthyridinyl, O-quinoxaliny, O-quinazoliny, O-cinnoliny, O-pteridinyl, O-carbazolyl, O-carboliny, O-benzotriazolyl, O-benzoxazolyl, O-phenanthridinyl, O-acridinyl, O-perimidinyl, O-phenanthrolinyl, O-phenazinyl, O-isothiazolyl, O-phenothiazinyl, O-isoxazolyl, O-furazanyl or O-phenoxazinyl S-thienyl, S-benzothieryl, S-dibenzothieryl, S-thianthrenyl, S-furyl, S-furfuryl, S-2H-pyranyl, S-benzofuranyl, S-isobenzofuranyl, S-benzimidazolyl, S-benzothiazolyl, S-dibenzofuranyl, S-phenoxythieryl, S-pyrrolyl, S-imidazolyl, S-pyrazolyl, S-pyridyl, S-bipyridyl, S-triazinyl, S-pyrimidinyl, S-pyrazinyl, S-pyridazinyl, S-indoliziny, S-isoindolyl, S-indolyl, S-indazolyl, S-puriny, S-quinoliziny, S-quinolyl, S-isoquinolyl, S-phthalazinyl, S-naphthyridinyl, S-quinoxaliny, S-quinazoliny, S-cinnoliny, S-pteridinyl, S-carbazolyl, S-carboliny, S-benzotriazolyl, S-benzoxazolyl, S-phenanthridinyl, S-acridinyl, S-perimidinyl, S-phenanthrolinyl, S-phenazinyl, S-isothiazolyl, S-phenothiazinyl, S-isoxazolyl, S-furazanyl or S-phenoxazinyl,

or

Q<sub>3</sub> and Q<sub>4</sub> together are a lactam, quinomethylene, hydantoin, acenaphthenequinone, azlactone, pyrazolonyl, barbituric acid, isoindolinone or isoindoline radical,

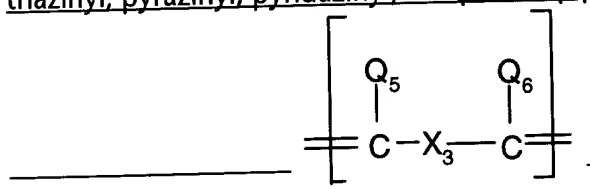
with the proviso that

Q<sub>4</sub> is not hydrogen and Q<sub>3</sub> is not a primary or secondary amine radical if R<sub>13</sub> is hydrogen, methoxy or hydroxyl and R<sub>12</sub>, R<sub>112</sub> and R<sub>113</sub> are hydrogen,

and

if n is 2

X is [X<sub>2</sub> as defined in claim 1,] thienyl, furyl, 2H-pyranyl, pyrrolyl, imidazolyl, pyrazolyl, pyridyl, triazinyl, pyrazinyl, pyridazinyl, morpholin, piperidyl, piperazinyl, or is



in which

X<sub>3</sub> is a single bond, C<sub>6</sub>-C<sub>24</sub> arylene, thienylene, benzothieryl, dibenzothieryl, thianthrenylene, furylene, furfurylene, 2H-pyranylene, benzofuranylene, isobenzofuranylene, dibenzofuranylene, phenoxythienylene, pyrrolylene, imidazolylene, pyrazolylene, pyridylene, bipyridylene, benzimidazolylene, benzothiazolylene, triazinylene, pyrimidinylene, pyrazinylene, pyridazinylene, indoliziny, isoindolylene, indolylene, indazolylene, puriny, quinoliziny, quinolylene, isoquinolylene, phthalazinylene, naphthyridiny, quinoxaliny, quinazoliny, cinnoliny, pteridinylene, carbazolylene, carboliny, benzotriazolylene, benzoxazolylene, phenanthridiny, acridiny, perimidiny, phenanthroliny, phenazinylene, isothiazolylene, phenothiaziny, isoxazolylene, furazanylene or phenoxazinylene 1,2-phenylene, 1,3-phenylene, 1,4-phenylene or naphthylene, or a tetravalent polyether, polyimine, polyamine radical, or

bi(C<sub>6</sub>-C<sub>24</sub>)arylene, bipyridylene, bipyrrylene, piperazinedionylene, quinodimethylene, imidazolonylen, isoindolinylen, and anthraquinoylfuranoylen, C<sub>2</sub>-C<sub>24</sub>alkenylene, in which bi(C<sub>6</sub>-C<sub>24</sub>)arylene, bipyridylene, bipyrrylene, piperazinedionylene, quinodimethylene, imidazolonylen, isoindolinylen, and anthraquinoylfuranoylen or C<sub>2</sub>-C<sub>24</sub>alkenylene are optionally interrupted by one or more intermediate units selected from the group consisting of -CH=CH-, -CH=N-, -N=N-, -CR<sub>44</sub>R<sub>42</sub>-, -CO-, -COO-, -OCO-, -NR<sub>42</sub>CO-, -CONR<sub>42</sub>-, -O-, -S-, -SO-, -SO<sub>2</sub>- or -NR<sub>42</sub>-.

in which

R<sub>42</sub> and R<sub>44</sub> independently of one another are hydrogen, C<sub>1</sub>-C<sub>24</sub>alkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkyl, C<sub>2</sub>-C<sub>24</sub>alkenyl, C<sub>6</sub>-C<sub>24</sub>aryl, C<sub>7</sub>-C<sub>25</sub>aralkyl, thienyl, benzothienyl, dibenzothienyl, thianthrenyl, furyl, furfuryl, 2H-pyranyl, benzofuranyl, isobenzofuranyl, benzimidazolyl, benzothiazolyl, dibenzofuranyl, phenoxythiaryl, pyrrolyl, imidazolyl, pyrazolyl, pyridyl, bipyridyl, triazinyl, pyrimidinyl, pyrazinyl, pyridazinyl, indoliziny, isoindolyl, indolyl, indazolyl, purinyl, quinoliziny, quinolyl, isoquinolyl, phthalazinyl, naphthyridinyl, quinoxaliny, quinazoliny, cinnoliny, pteridinyl, carbazolyl, carboliny, benzotriazolyl, benzoxazolyl, phenanthridinyl, acridinyl, perimidinyl, phenanthroliny, phenazinyl, isothiazolyl, phenothiazinyl, isoxazolyl, furazanyl or phenoxazinyl,

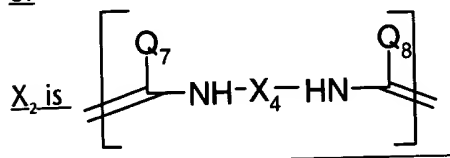
with the proviso that if R<sub>12</sub>, R<sub>13</sub>, R<sub>112</sub> or R<sub>113</sub> are all tert-butyl or all hydrogen, Q<sub>5</sub> and Q<sub>6</sub> are hydrogen, X<sub>3</sub> is not 1,4-phenylene, and Q<sub>5</sub> and Q<sub>6</sub> independently of one another are hydrogen, C<sub>6</sub>-C<sub>24</sub>aryl, C<sub>6</sub>-C<sub>24</sub>aryloxy, C<sub>1</sub>-C<sub>24</sub>alkyl, C<sub>1</sub>-C<sub>24</sub>alkoxy, C<sub>1</sub>-C<sub>24</sub>alkylthio, C<sub>5</sub>-C<sub>12</sub>cycloalkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy,

C<sub>5</sub>-C<sub>12</sub>cycloalkylthio, C<sub>2</sub>-C<sub>24</sub>alkenyl,

C<sub>6</sub>-C<sub>24</sub>aryl, C<sub>6</sub>-C<sub>24</sub>aryloxy, C<sub>6</sub>-C<sub>24</sub>arylthio, thienyl, benzothienyl, dibenzothienyl, thianthrenyl, furyl, furfuryl, 2H-pyranyl, benzofuranyl, isobenzofuranyl, benzimidazolyl, benzothiazolyl, dibenzofuranyl, phenoxythiaryl, pyrrolyl, imidazolyl, pyrazolyl, pyridyl, bipyridyl, triazinyl, pyrimidinyl, pyrazinyl, pyridazinyl, indoliziny, isoindolyl, indolyl, indazolyl, purinyl, quinoliziny, quinolyl, isoquinolyl, phthalazinyl, naphthyridinyl, quinoxaliny, quinazoliny, cinnoliny, pteridinyl, carbazolyl, carboliny, benzotriazolyl, benzoxazolyl, phenanthridinyl, acridinyl, perimidinyl, phenanthroliny, phenazinyl, isothiazolyl, phenothiazinyl, isoxazolyl, furazanyl or phenoxazinyl O-thienyl, O-benzothienyl, O-dibenzothienyl, O-thianthrenyl, O-furyl, O-furfuryl, O-2H-pyranyl, O-benzofuranyl, O-isobenzofuranyl, O-benzimidazolyl, O-benzothiazolyl, O-dibenzofuranyl, O-phenoxythiaryl, O-pyrrolyl, O-imidazolyl, O-pyrazolyl, O-pyridyl, O-bipyridyl, O-triazinyl, O-pyrimidinyl, O-pyrazinyl, O-pyridazinyl, O-indoliziny, O-isoindolyl, O-indolyl, O-indazolyl, O-purinyl, O-quinoliziny, O-quinolyl, O-isoquinolyl, O-phthalazinyl, O-naphthyridinyl, O-quinoxaliny, O-quinazoliny, O-cinnoliny, O-pteridinyl, O-carbazolyl, O-carboliny, O-benzotriazolyl, O-benzoxazolyl, O-phenanthridinyl, O-acridinyl, O-perimidinyl, O-phenanthroliny, O-phenazinyl, O-isothiazolyl, O-phenothiazinyl, O-isoxazolyl, O-furazanyl or O-phenoxazinyl S-thienyl, S-benzothienyl, S-dibenzothienyl, S-thianthrenyl, S-furyl, S-furfuryl, S-2H-pyranyl, S-benzofuranyl, S-isobenzofuranyl, S-benzimidazolyl, S-benzothiazolyl, S-dibenzofuranyl, S-phenoxythiaryl, S-pyrrolyl, S-imidazolyl, S-pyrazolyl, S-pyridyl, S-bipyridyl, S-

triazinyl, S-pyrimidinyl, S-pyrazinyl, S-pyridazinyl, S-indoliziny, S-isoindolyl, S-indolyl, S-indazolyl, S-puriny, S-quinoliziny, S-quinolyl, S-isoquinolyl, S-phthalazinyl, S-naphthyridinyl, S-quinoxaliny, S-quinazoliny, S-cinnoliny, S-pteridinyl, S-carbazolyl, S-carboliny, S-benzotriazolyl, S-benzoxazolyl, S-phenanthridinyl, S-acridinyl, S-perimidinyl, S-phenanthroliny, S-phenazinyl, S-isothiazolyl, S-phenothiazinyl, S-isoxazolyl, S-furazanyl or S-phenoxazinyl.

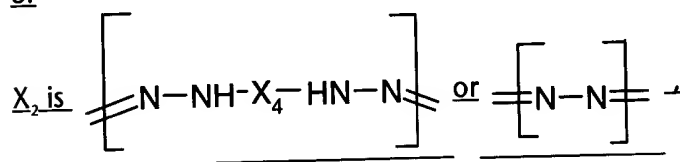
or



in which

$Q_7$  and  $Q_8$  independently of one another are  $Q_5$  or  $Q_6$ , and  $X_4$  is  $C_6-C_{24}$ arylene,  $A_5-A_{18}$ heteroarylene, a polymethyldiene or divalent polyether, polyimine, polyamine radical, or  $bi(C_6-C_{24})$ arylene, bipyridylene, bipyrrolylen, piperazinedionylen, quinodimethylene, imidazolonylen, isoindolinylen, and anthraquinoylfuranoylen  $C_2-C_{24}$ alkenylene, in which  $bi(C_6-C_{24})$ arylene, bipyridylene, bipyrrolylen, piperazinedionylen, quinodimethylene, imidazolonylen, isoindolinylen, and anthraquinoylfuranoylen or  $C_2-C_{24}$ alkenylene are optionally interrupted by one or more intermediate units selected from the group consisting of  $-CH=CH-$ ,  $-CH=N-$ ,  $-N=N-$ ,  $-CR_{44}R_{42}-$ ,  $-CO-$ ,  $-COO-$ ,  $-OCO-$ ,  $-NR_{42}CO-$ ,  $-CONR_{42}-$ ,  $-O-$ ,  $-S-$ ,  $-SO-$ ,  $-SO_2-$  or  $-NR_{42}-$ .

or



and

$R_{12}$ ,  $R_{112}$ ,  $R_{13}$  and  $R_{113}$  independently of one another are hydrogen, halogen, OH,  $NO_2$ ,  $R_{14}$ ,  $OR_{14}$

$OC_9-C_{18}$ alkyl or  $SC_9-C_{18}$ alkyl, in which

$R_{14}$  is  $C_1-C_{24}$ alkyl which is unsubstituted or substituted one or more times by oxo or by  $COO^-X_5^+$  and

which is uninterrupted or interrupted one or more times by O, N and/or S, or is  $C_7-C_{18}$ aralkyl or

$C_6-C_{12}$ aryl unsubstituted or substituted one or more times by halogen,  $OR_{16}$ ,  $NR_{16}R_{17}$ ,  $COOR_{16}$ ,

$CONR_{16}R_{17}$ ,  $NR_{18}COR_{16}$  or  $NR_{18}COOR_{16}$

$X_5^+$  is a cation  $H^+$ ,  $Na^+$ ,  $K^+$ ,  $Mg^{++}$ ,  $Ca^{++}$ ,  $Zn^{++}$ ,  $Al^{+++}$ , or  $(NR_{16}R_{17}R_{18}R_{19})^+$ , and

$R_{16}$  and  $R_{17}$  independently of one another are hydrogen,  $C_6-C_{12}$ aryl,  $C_7-C_{10}$ aralkyl, or  $C_1-C_8$ alkyl which is unsubstituted or substituted one or more times by halogen, hydroxyl or  $C_1-C_4$ alkoxy, or

$R_{16}$  and  $R_{17}$  in  $NR_{16}R_{17}$  or  $CONR_{16}R_{17}$ , together with the nitrogen atom connecting them, are pyrrolidine, piperidine, piperazine or morpholine each of which is unsubstituted or substituted from one to four times by  $C_1$ - $C_4$ alkyl,

and

$R_{18}$  and  $R_{19}$  independently of one another are hydrogen,  $C_1$ - $C_8$ alkyl,  $C_6$ - $C_{10}$ aryl or  $C_6$ - $C_{12}$ aralkyl, or  $R_{12}$  and  $R_{112}$ ,  $R_{112}$  and  $R_{13}$ ,  $R_{13}$  and  $R_{113}$  independently of one another are each together divalent radicals, such as polycyclic radicals.